Manitoba Health Statistical Update on HIV/AIDS

1985 - Dec 2003

Communicable
Disease Control Unit
Public Health

Manitoba
Health

Manitoba

Health
Healthy Living
Public Health Branch
Communicable Disease Control Unit
Fourth Floor, 300 Carlton Street
Winnipeg MB R3B 3M9
CANADA
Telephone: (204) 788-6737
Fax: (204) 948-2040

Santé
Vie saine
Direction de la santé publique
Prévention des maladies transmissibles
300, rue Carlton, 4e étage
Winnipeg MB R3B 3M9
CANADA
Téléphone: (204) 788-6737
Télécopieur: (204) 948-2040

August 3, 2004

Dear Colleague:

Enclosed please find the ***Manitoba Health Statistical Update on HIV/AIDS, 1985 to December 2003***.

An electronic copy of the Update as well as other provincial surveillance data may be found on the Manitoba Health web-site at the following address:

http://www.gov.mb.ca/health/publichealth/cdc/surveillance/index.html

To access national surveillance reports, please visit Health Canada's website at:

http://www.hc-sc.gc.ca/hpb/lcdc/publicat.html

Please note that this report will now be provided on an annual-basis and will only be available electronically on the web-site. If you do not have access to the Internet and wish to review a hard copy, please contact Gloria Watkins at 788-6737. For monthly statistics, please refer to the Communicable Disease Report, which is published monthly on the Manitoba Health web-site.

Carole Beaudoin, BA, MSc, PhD
Communicable Diseases Epidemiologist
Public Health Branch
Manitoba Health

Michelyn Wood, BSc, MSc
Field Surveillance Officer
Centre for Infectious Disease Prevention and Control
Health Canada

105-00020/

MANITOBA HEALTH STATISTICAL UPDATE ON HIV/AIDS 1985 TO December 2003

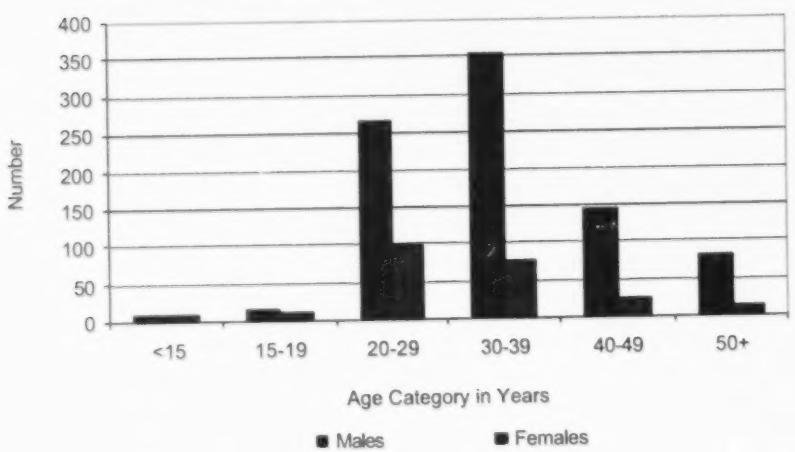
HIV – January 1, 1985 to December 31, 2003

Between January 1 and December 31, 2003, 111 newly diagnosed cases of HIV were reported in Manitoba; 71 males and 40 females, bringing the total number of cases to 1097 since 1985. While females represent 21% of all HIV cases reported since 1985, 8% of HIV positive individuals were accounted for by females between 1985 and 1994 as compared to 31% between 1995 and December 2003. The majority of all new cases, both male and female, were between the ages of 20 and 39 years.

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE, 1985-2003

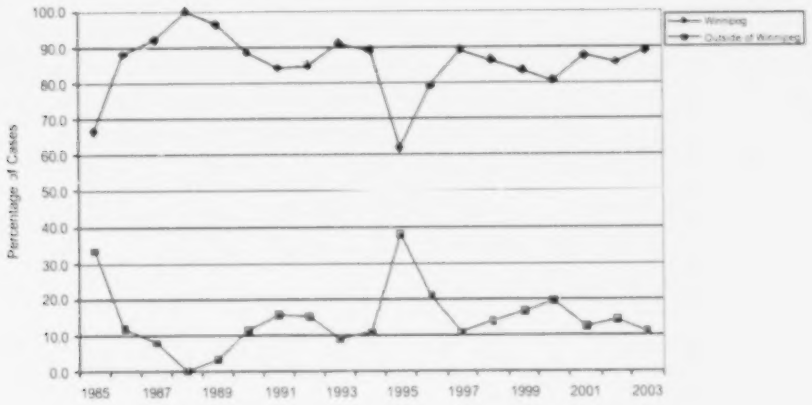
Year	Male	Female	Total
1985	3	0	3
1986	70	0	70
1987	50	3	53
1988	37	4	41
1989	57	3	60
1990	40	3	43
1991	33	6	39
1992	39	6	45
1993	55	4	59
1994	50	7	57
1995	42	9	51
1996	37	16	53
1997	59	17	76
1998	53	18	71
1999	53	20	73
2000	38	19	57
2001	39	26	65
2002	41	29	70
2003	71	40	111
Total	**867**	**230**	**1097**

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY AGE AND GENDER, 1985-2003



With the exception of 1995, regional distribution of newly identified HIV cases has remained consistent since the early 90s with over 80% of the cases residing in Winnipeg.

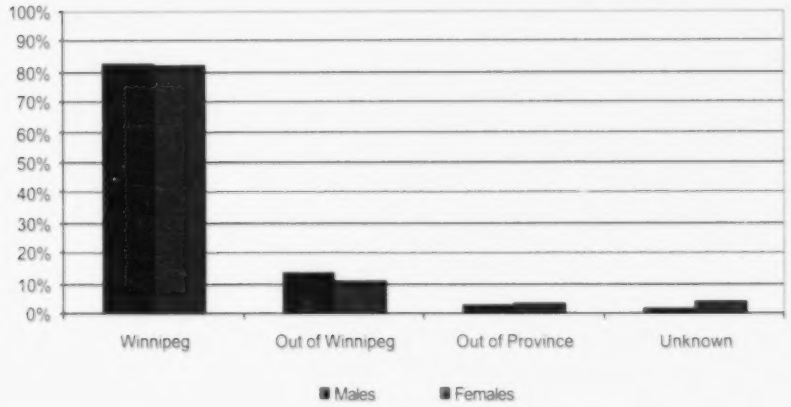
PERCENTAGE OF HIV POSITIVE CAES* BY REGION OF RESIDENCE, MANITOBA, 1985-2003



*Cases residing out-of-province or of unknown residence (at the time of testing) are excluded (n=53).

Between 1985 and December 2003, 82% (n=903) of all HIV cases reported (at the time of testing) were residents of Winnipeg, while 13% (n=141) of cases resided outside of Winnipeg. Of the total cases, 3% (n=29) of individuals were from out of province while 2% (n=24) of individuals reported missing or unknown geographic information.

PERCENTAGE OF HIV POSITIVE INFECTIONS IN MANITOBA BY REGION OF RESIDENCE AND GENDER, 1985-2003



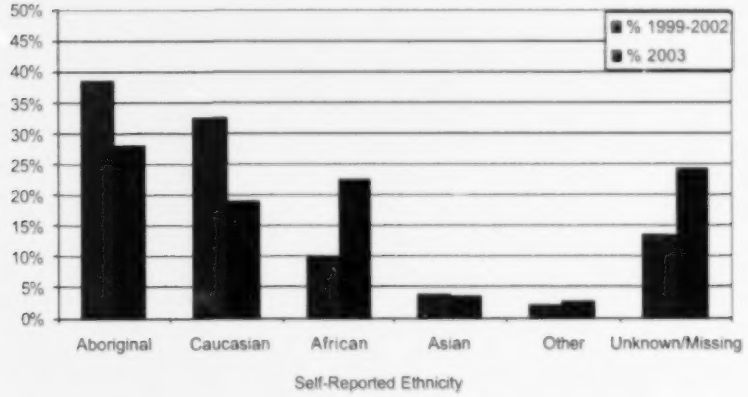
Self-Reported Ethnicity

Observed changes in ethnic distribution between the 1999-2002 time period and 2003 are difficult to interpret as almost one-quarter of all HIV Notification forms have incomplete ethnicity information.

In 2003, 27% (31/111 cases) of the newly diagnosed cases of HIV were self-reported as Aboriginal at the time of follow-up, while 23% (25/111 cases) were self-reported as African and 19% (21/111) were self-reported as Caucasian. The most commonly mode of transmission for Aboriginals was injection drug use (12/31 cases; 39%). For African, the majority of individuals reported endemic [1] (20/25; 80%) and the majority of Caucasians reported heterosexual activity with person(s) at increased risk of HIV (11/21; 52%).

Between January 1999 and December 2002, the majority of new HIV cases self-reported as Aboriginal (102/265 cases; 38%), Caucasian (86/265 cases; 32%) and African (26/265; 10%). Similar patterns regarding the predominant modes of transmission were observed between 1999 and 2002. For Aboriginals, the most common transmission category reported was IDU [2] (58/102 cases; 57%). The predominant mode reported among Caucasians was heterosexual activity with person(s) at increased risk of HIV (24/66 cases; 36%) while the most commonly reported mode of transmission reported by African was endemic (20/26; 77%).

PERCENTAGE OF NEW POSITIVE HIV CASES BY ETHNICITY IN MANITOBA,
JANUARY 1999 TO DECEMBER 2002 AND JANUARY 2003 TO DECEMBER 2003



It is important to note that these data are self-reported and reflect individuals coming forward for testing. Misclassification may occur when the case fails to self-identify, leading to under-representation. In addition, approximately 17% files of HIV cases reported between January 1999 and December 2003 were incomplete due to missing or unknown information pertaining to ethnicity.

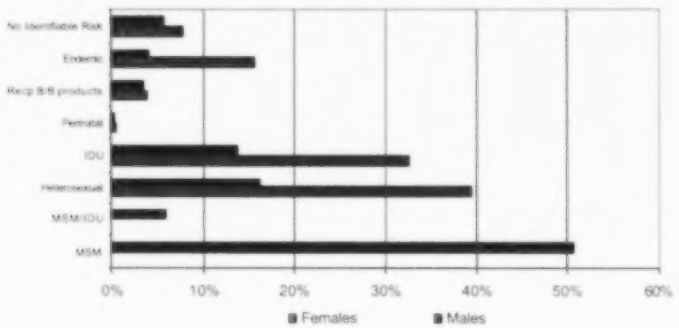
[1] Endemic includes persons originating from or residing in countries with a high prevalence of HIV.
[2] Injection drug use.

HIV Transmission Patterns

Of the 40 females testing HIV positive in 2003, the predominant modes of transmission, after excluding those with no identified risk (n=6; 15%), were sex with men who are at an increased risk of HIV (16/34 cases; 47%) and having lived in an HIV endemic country (11/34 cases; 32%). Of the 71 males, excluding those with no identified risk (n=16; 23%), the predominant modes of transmission were injection drug use (17/55; 31%) and sex with females who are at an increased risk of HIV (15/55; 27%).

Between 1985 and 2003, the most common modes of transmission for females include sex with men who are at an increased risk of HIV and injection drug use. For males, the primary modes of transmission were sex with men, IDU and sex with women who are at an increased risk of HIV.

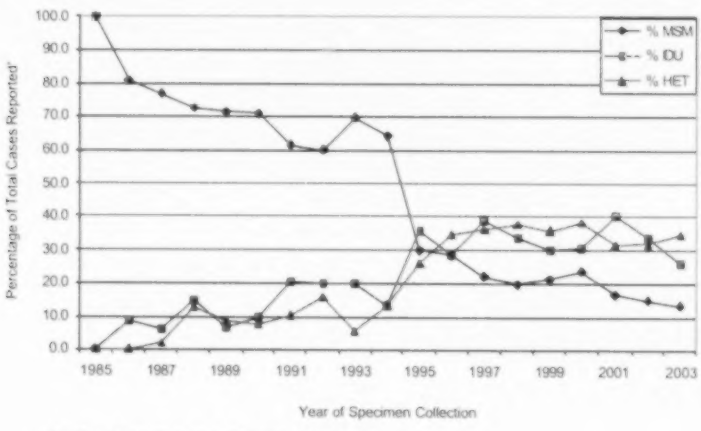
PERCENTAGE OF HIV POSITIVE INFECTIONS IN MANITOBA BY PRIMARY TRANSMISSION CATEGORY, 1985-2003



In total, MSM[3], IDU and heterosexual activity with person(s) at increased risk of HIV represent approximately 90% of all HIV antibody positive individuals diagnosed between 1985 and 2003 (excluding cases with missing/unknown mode of transmission; n=67). However, it is important to note that there is a steady increase in cases reporting having lived in an HIV endemic country as their primary mode of transmission. This transmission category has more than tripled between 1999 and 2003 from 5% (4/73) to 20% (22/111).

Examined over time, it is evident that the proportion of individuals reporting MSM has declined since 1985 with a substantial drop in 1995. Corresponding to a decline with men who have sex with men as a risk category, both injection drug use and heterosexual activity with person(s) at increased risk of HIV witnessed considerable increases in the mid-1990s and have generally platueaued.

RISK PROFILE FOR HIV POSITIVE CASES IN MANITOBA, 1985-2003



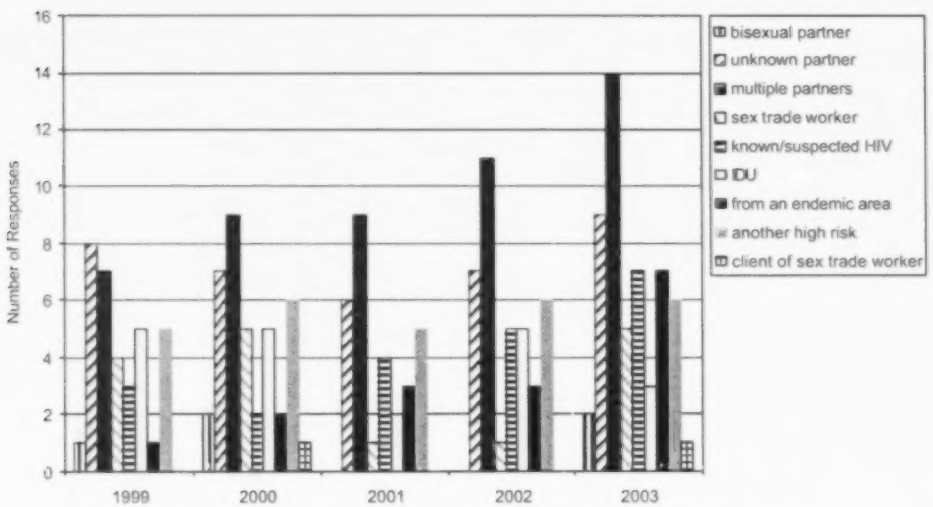
*Cases with no identified risk (NIR) were excluded.
IDU includes MSM/IDU.

[3] Men who have sex with men.

Heterosexual contact with person(s) at increased risk of HIV is not a homogenous grouping, but rather reflects heterosexual partnering with someone who is of the opposite sex, bisexual, unknown, a sex trade worker, a client of a sex trade worker, someone with known or suspected HIV, someone from an HIV endemic country or another high risk partner.

In 2003, the majority of individuals reporting heterosexual contact as their primary mode of transmission reported heterosexual contact with multiple sex partners (n=14; 45%) and heterosexual contact with an unknown partner (n=9; 29%). Similar patterns were observed between 1999 and 2002, where the majority of cases reported having heterosexual contact with multiple partners (n=36; 42%) and unknown partners (n=28; 33%).

HIV CASES IN MANITOBA REPORTING HETEROSEXUAL CONTACT WITH PERSON(S) AT RISK OF HIV, 1999-2003



Note: Number of responses may exceed the total number of individuals reporting heterosexual contact because individuals may report multiple sexual contact categories.

For descriptive HIV tables, please refer to Appendix C.

AIDS – January 1985 to December 31, 2003

In the past, Manitoba Health reported statistics on AIDS cases based on the year that the individual was reported. Instead, this report describes AIDS cases based on year of diagnosis of their first AIDS defining illness.

In 2003, 12 new cases of AIDS were reported; 7 cases were male and 5 cases were female. These case reports bring the total number of AIDS cases to 224 since 1985. The number of reported AIDS cases has declined somewhat over recent years, due in part to early diagnosis and improved treatment of individuals with HIV infection. Seventy-six percent of individuals reported with AIDS have died; however, delays in reporting of both cases and deaths make it difficult to determine precisely the incidence and mortality rate.

Further description of AIDS cases can be found in Appendix D.

APPENDIX A

Reporting of HIV and AIDS in Manitoba

In Manitoba, HIV testing is non-nominal. A prescribed patient code is assigned when a physician completes the appropriate requisition. This code includes the last two letters of the mother's maiden name, the patient's year of birth, day of birth, gender, regional health authority (as defined by number) and first three characters of the patient's postal code. Prior to August 1998, the former Manitoba Health region (as defined by letter) was assigned to identify the patient's region of residence. As well, postal code was not included.

All HIV antibody testing is carried out at the Cadham Provincial Laboratory (CPL). Positive test results are subsequently reported to the Director of Communicable Disease Control as required by the *Diseases and Dead Bodies Regulation, Public Health Act*. It has been the practice of Communicable Disease Control (CDC) Unit to enter case information into the HIV Database *after* the physician (requesting the test) has verified the test result as a new or existing case. However, there have been delays in the completion of and return of the *Notification of HIV Infection Form* (Appendix B) by health care professionals. Consequently, all HIV positive test results are considered new cases unless otherwise advised by the appropriate health care professional. This practice will avoid the under-reporting of HIV in Manitoba, although, duplicate cases may be included. The CDC Unit continues to work with Regional Health Authorities towards a satisfactory resolution in this regard. A collaborative effort between the Winnipeg Regional Health Authority and the CDC Unit, Manitoba Health has decreased the number of outstanding *Notification of HIV Forms* for 1999 to present.

Twice a year, line-listed data from the HIV database are extracted and forwarded to the Centre for Infectious Disease Prevention and Control, Health Canada in Ottawa for inclusion within the national report, *HIV and AIDS in Canada*. Although non-nominal, the prescribed patient code is stripped prior to release. Instead, a sequential case number assigned by the database is used to distinguish one case from another.

Provincially and nationally, AIDS cases and deaths are reportable by physicians. A federal reporting form, the *AIDS Case Reporting Form* is used for this purpose. New AIDS cases and deaths are reported to the Director of Communicable Disease Control and subsequently forwarded to the Centre for Infectious Disease Prevention and Control. The Centre works diligently with other provinces to ensure that there are no duplications in the counting of cases. The variations seen from previous reports with respect to the number of AIDS cases and deaths may be accounted for by delays in reporting as well as the fact that in Manitoba, the database is updated immediately once surveillance staff are notified that a particular case has been accounted for in another province.

APPENDIX B

NOTIFICATION OF HIV INFECTION (Form prescribed pursuant to subsection 43(2) The Public Health Act: P210)

DESIGNATED PATIENT CODE _____
(As per CPL requisition: Last two initials of mother's maiden name; year of birth; day of birth; gender; RHA of residence code; 3-digit forward sortation postal code)

PHYSICIAN NAME _____

LABORATORY REQUISITION NUMBER _____

SPECIMEN DATE _____/_____/_____ (yyyy mm dd)

PRINCIPAL REASON FOR TEST (ONE ONLY)
- ☐ Requested by patient (no risk identified)
- ☐ Risk factor present (asymptomatic)
- ☐ Symptomatic ☐ STD work-up
- ☐ Travel ☐ Insurance
- ☐ Prenatal
- ☐ Other (specify) _____

GENDER ☐ Male ☐ Female ☐ Trans-gender

If female, pregnant? ☐ Yes ☐ No
Receiving anti-retroviral drug(s)? ☐ Yes ☐ No

M/S ☐ Unmarried ☐ Married/CL ☐ S/D/W

COUNTRY OF BIRTH
☐ Canada ☐ Other _____
If other, year of arrival in Canada _____

ETHNICITY
☐ Caucasian ☐ African/African-American
☐ Aboriginal ☐ Asian
Other _____

If aboriginal, treaty status: ☐ Treaty ☐ Non-treaty
Band number: _____

CLINICAL STATUS

Are HIV-related symptoms present? ☐ Yes ☐ No

Does the patient have AIDS? ☐ Yes ☐ No

PAST HISTORY

1) Previous HIV testing: ☐ Yes ☐ No ☐ Unknown
If yes:
Date of most recent negative test: _____
Date of first positive test: _____

2) History of STD ever ☐ Yes ☐ No

3) STD in past 3 months ☐ Yes ☐ No

4) Previous blood or tissue donation ☐ Yes ☐ No

If yes, most recent date _____

Location _____

RISK INFORMATION
(Since 1978; check all client characteristics that apply)

	Yes	No	Unk.
1) Has had sex with:			
A male	☐	☐	☐
A female	☐	☐	☐
2) Has had heterosexual sex with:			
A bisexual partner	☐	☐	☐
An unknown partner	☐	☐	☐
Multiple sex partners	☐	☐	☐
A sex trade worker	☐	☐	☐
A client of a sex trade worker (i.e. patient is a sex trade worker)	☐	☐	☐
A person with known/suspected HIV	☐	☐	☐
An injection drug user	☐	☐	☐
A person from an HIV endemic area	☐	☐	☐
Another high risk partner	☐	☐	☐
3) Has used needles for recreational (non-medical) drug injection	☐	☐	☐
4) Has received blood or blood products a) Prior to Nov. 1985	☐	☐	☐
b) After Nov. 1985	☐	☐	☐
5) Has received blood or blood products for treatment of a coagulation disorder			
a) Prior to Nov. 1985	☐	☐	☐
b) After Nov. 1985	☐	☐	☐
6) Has been exposed to HIV in an occupational setting (e.g. needlestick injury)	☐	☐	☐
7) Born to an HIV positive mother	☐	☐	☐
8) Born in or resident of an HIV-endemic country	☐	☐	☐

9) Has had:
- ☐ **tattoo**
- ☐ **body piercing**
- ☐ **acupuncture**
- ☐ **blood contact from bite, altercation, etc.**

10) Other exposure which could have been source of HIV infection, specify _____

11) No identifiable risk factor ☐

Interview for partners at risk to be done by: **Physician** Yes ☐ No ☐ **Public Health Nurse** Yes ☐ No ☐

If by public health nurse, physician must first obtain informed consent from client. Has informed consent been obtained? ☐ **Yes** ☐ **No**

CONTACT INFORMATION ON PARTNERS TO BE FOLLOWED BY PUBLIC HEALTH:

Name _____ Home tel _____ Work tel _____
Alias _____ Sex ☐ F ☐ M
Address _____ Postal Code _____ Age/Birth date _____
Occupation _____ Place of Employment/School _____
☐ Live-In Partner ☐ Single Other_____ Lives with ☐ Parents ☐ Informant ☐ Other
Characteristics: Height_____ Wt._____ Eye Colour_____ Hair_____ Complexion _____
Sexual Exposure: (First)_____To_____(Last) Parenteral(First)_____To_____(Last)
Notified: Yes ☐ Date _____ No ☐ By Whom _____

APPENDIX C
HIV Descriptive Tables

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY AGE AND GENDER, 2003, 2002, CUMULATIVE 1985-2001 AND 1985-2003

Age Category	Gender	2003	2002	1985-2001	1985-2003
		Total	Total	Total	Total
<15	M	1	0	6	7
	F	3	1	4	8
15-19	M	0	1	14	15
	F	0	2	9	11
20-29	M	13	5	248	266
	F	14	9	75	98
30-39	M	33	16	304	353
	F	15	14	47	76
40-49	M	18	11	115	144
	F	7	1	17	25
50+	M	6	8	68	82
	F	1	2	9	12
Total	**M**	**71**	**41**	**755**	**867**
	F	**40**	**29**	**161**	**230**

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY GEOGRAPHIC RESIDENCE AND GENDER, 2003, 2002, CUMULATIVE 1985-2001 AND 1985-2003

Geographic Residence	Gender	2003	2002	1985-2001	1985-2003
		Total	Total	Total	Total
Winnipeg	M	52	34	628	714
	F	29	26	134	189
Brandon	M	1	0	1	2
	F	0	1	0	1
Assiniboine	M	1	0	1	2
Brandon, Assiniboine	M	0	0	18	18
	F	0	0	1	1
N. Eastman	M	1	1	2	4
	F	0	0	1	1
S. Eastman	M	0	1	1	2
N. Eastman, S. Eastman	M	0	0	11	11
	F	0	0	2	2
Interlake	M	1	0	26	27
	F	0	2	3	5
Central	M	1	4	27	32
	F	2	0	8	10
Parkland	M	0	0	5	5
	F	0	0	1	1
Norman	M	0	1	4	5
	F	0	0	1	1
Burntwood	M	2	0	6	8
	F	1	0	2	3
Unknown	M	12	0	3	15
	F	8	0	1	9
Out of Province	M	0	0	22	22
	F	0	0	7	7
Total	**M**	**71**	**41**	**755**	**867**
	F	**40**	**29**	**161**	**230**

NUMBER OF INDIVIDUALS TESTING HIV ANTIBODY POSITIVE BY TRANSMISSION CATEGORY AND GENDER, 2003, 2002, CUMULATIVE 1985-2001 AND 1985-2003

Transmission Category	Gender	2003	2002	1985-2001	1985-2003
		Total	Total	Total	Total
MSM	M	12	10	417	439
MSM/IDU	M	4	0	47	51
Heterosexual	M	15	12	114	141
	F	16	9	66	91
IDU	M	13	12	95	120
	F	6	10	59	75
Perinatal	M	0	0	2	2
	F	0	0	1	1
Recp B/B products	M	0	2	28	30
	F	1	0	8	9
Endemic	M	11	2	22	35
	F	11	9	16	36
NIR	M	16	3	30	49
	F	6	1	11	18
Total	**M**	**71**	**41**	**755**	867
	F	**40**	**29**	**161**	230

MSM = men having sex w ith men
IDU = injection dn _ use
Recp B/B products = recipient of blood/blood products
NIR = no identified risk
Heterosexual activity includes persons reporting heterosexual activity with person(s) at risk of HIV infection
Endemic includes persons originating from or residing in countries with a high prevalence of HIV

APPENDIX D
AIDS Descriptive Tables

NUMBER OF REPORTED AIDS CASES AND DEATHS*
IN MANITOBA BY YEAR OF DIAGNOSIS

Year	Cases Reported	Deaths Reported
1985	1	1
1986	13	13
1987	9	9
1988	5	5
1989	16	13
1990	10	10
1991	24	19
1992	15	13
1993	16	14
1994	16	12
1995	16	13
1996	16	8
1997	4	3
1998	10	7
1999	12	9
2000	7	7
2001	9	6
2002	13	5
2003	12	3
Total	**224**	**170**

Because of delays in reporting, the number of reported cases and deaths does not necessarily represent the number of cases diagnosed or deaths occurring during this period.

NUMBER OF REPORTED AIDS CASES IN MANITOBA BY AGE, GENDER AND DIAGNOSIS YEAR

Age Category	Gender	2003	2002	1985-2001	1985-2003
<15	M	0	0	2	2
	F	0	0	1	1
15-19	M	0	0	1	1
	F	0	0	0	0
20-29	M	1	0	30	31
	F	1	0	3	4
30-39	M	3	7	86	96
	F	3	1	6	10
40-49	M	2	3	39	44
	F	1	1	4	6
50+	M	1	1	25	27
	F	0	0	2	2
Total	**M**	**7**	**11**	**183**	**201**
	F	**5**	**2**	**16**	**23**

NUMBER OF REPORTED AIDS CASES IN MANITOBA BY GEOGRAPHIC RESIDENCE AT TIME OF DIAGNOSIS AND GENDER

Regional Health Authority	Gender	2003	2002	1985-2001	1985-2003
ASSINIBOINE	M	0	0	3	3
BRANDON	M	0	0	3	3
BURNTWOOD	M	0	0	1	1
CHURCHILL	F	0	0	1	1
INTERLAKE	M	0	0	3	3
NOR-MAN	M	0	1	0	1
PARKLAND	M	0	0	3	3
	F	0	0	1	1
SOUTH EASTMAN	M	0	0	1	1
WINNIPEG	M	3	10	165	178
	F	3	2	14	19
UNKNOWN/MISSING	M	4	0	1	5
	F	2	0	0	2
NON RESIDENT	M	0	0	3	3
Total	**M**	**7**	**11**	**183**	**201**
	F	**5**	**2**	**16**	**23**

NUMBER OF REPORTED AIDS CASES IN MANITOBA BY PRIMARY TRANSMISSION CATEGORY, GENDER AND YEAR OF DIAGNOSIS

Transmission Category	Gender	2003	2002	1985-2001	1985-2003
MSM	M	0	3	126	129
MSM/IDU	M	0	1	9	10
Heterosexual	M	2	4	18	24
	F	1	0	7	8
IDU	M	3	3	10	16
	F	3	2	2	7
Perinatal	M	0	0	1	1
	F	0	0	1	1
Recp B/B products	M	1	0	15	16
	F	0	0	2	2
Endemic	M	0	0	2	2
	F	1	0	4	5
NIR	M	1	0	2	3
Total	**M**	**7**	**11**	**183**	**201**
	F	**5**	**2**	**16**	**23**